

DOCKET FILE COPY ORIGINAL

Before the  
Federal Communications Commission  
Washington, D.C. 20554

RECEIVED

SEP 15 1997

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of

Reallocation of Television Channels  
60-69, the 746-806 MHz Band

)  
)  
)  
)

ET Docket No. 97-157

TO: The Commission

**COMPU-DAWN'S COMMENTS ON THE  
NOTICE OF PROPOSED RULE MAKING**

Covington & Burling  
1201 Pennsylvania Avenue, N.W.  
Post Office Box 7566  
Washington, DC 20044

September 15, 1997

No. of Copies rec'd  
List ABCDE

0+10

## TABLE OF CONTENTS

	<u>Page</u>
I. SUMMARY AND INTRODUCTION . . . . .	1
II. CONGRESS DIRECTS THE COMMISSION TO INCLUDE CERTAIN NONGOVERNMENTAL ORGANIZATIONS AS CANDIDATES FOR ALLOCATED PUBLIC SAFETY SPECTRUM . . . . .	3
III. ACCESS TO SPECTRUM WILL GIVE COMMERCIAL ENTITIES THE TOOLS TO DEVELOP A COMPLETE SOLUTION TO THE PUBLIC SAFETY COMMUNITY'S INTEROPERABILITY PROBLEMS . . . . .	4
IV. CONGRESS' DEFINITIONS FOSTER MUCH-NEEDED PARTNERSHIPS BETWEEN COMMERCIAL ENTITIES AND PUBLIC SAFETY AGENCIES . . . . .	6
V. CONCLUSION . . . . .	7

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of	)	
	)	
Reallocation of Television Channels	)	ET Docket No. 97-157
60-69, the 746-806 MHz Band	)	

TO: The Commission

**COMPU-DAWN'S COMMENTS ON THE  
NOTICE OF PROPOSED RULE MAKING**

Compu-DAWN, Inc. ("Compu-DAWN") hereby submits its comments on the Commission's Notice of Proposed Rulemaking ("Notice") in the above-captioned proceeding. Compu-DAWN wholly supports the Commission's proposal to allocate 24 MHz of spectrum for public safety uses. Compu-DAWN files these comments to urge the Commission to harmonize its proposal with Congress' recent amendments to the Communications Act of 1934 ("Communications Act").<sup>1/</sup> These amendments direct the Commission to allocate 24 MHz of spectrum for public safety services and to include certain nongovernmental entities serving public safety agencies as candidates to receive a portion of the allocated spectrum. The Commission, which failed to include such entities in its own proposal for the reallocation of the 746-806 MHz band, must be guided by Congress' recent amendments and tailor its regulations accordingly.

**I. SUMMARY AND INTRODUCTION**

Commercial entities such as Compu-DAWN play a critical role in ensuring that public safety agencies are able to protect life and property in the most safe and efficient

---

<sup>1/</sup> See *Balanced Budget Act of 1997*, P.L. No. 105-33, (amending Title III of the Communications Act by adding section 337, entitled "Allocation and Assignment of New Public Safety Services Licenses and Commercial Licenses") (hereinafter the "Budget Act").

manner. Since 1983, Compu-DAWN's exclusive mission has been to provide public safety software applications to law enforcement, fire departments and emergency management systems.<sup>2/</sup> Its products greatly enhance the workings of emergency public safety dispatch and communications systems.<sup>3/</sup> By permitting voiceless dispatch, instantaneous roadside access to local, state and national criminal databases, pre-plans for emergency or disaster situations, and photo transmissions in the field,<sup>4/</sup> these systems have been praised for putting another cop on the beat for each officer that is equipped with a Compu-DAWN system. More than 60 public safety agencies now utilize some or all of these modules.<sup>5/</sup> One of the chief advantages of Compu-DAWN's system over many agencies' systems is that it can operate on all the frequencies designated for public safety use.

Congress' recent amendments to the Communications Act expressly contemplate allocating public safety spectrum to private entities like Compu-DAWN that work

---

<sup>2/</sup> Compu-DAWN's commitment to public safety is evidenced by its involvement in the National Public Safety Telecommunications Council ("NPSTC"). As a member of NPSTC's subcommittee on spectrum use, Compu-DAWN is able to understand the evolving needs of the public safety community and develop its products accordingly. Compu-DAWN also is involved in educating both the domestic and international community on commercial technologies. Indeed, in July, Compu-DAWN participated in an official U.S. mission to South-Africa on communications issues.

<sup>3/</sup> Compu-DAWN's mobile product AMO™ (Alecs 2000™ Mobile Online) provides emergency response drivers with interactive direct access to headquarters as well as local, state and national crime information databases. Compu-DAWN's system also brings users a full range of advanced solutions: transmission of photos, text-to-speech, voice command recognition that converts to data, mapping and automatic vehicle locating services. See Description of Compu-DAWN, attached hereto as Exhibit A. For crafting its innovative information products and solutions, Compu-DAWN received the 1997 Software Product of the Year Award, the highest award presented in the Long Island Software Awards, attached hereto as Exhibit B.

<sup>4/</sup> These photo transmissions serve a critical function by allowing officers in the field to, among other things, create line-ups, find missing persons, verify signatures and study mug shots.

<sup>5/</sup> See Letter dated February 19, 1997 from the Garden City Police Department to the Long Island Research Institute, attached hereto as Exhibit C.

in partnership with different public safety agencies. More importantly, by instructing the Commission to make public safety spectrum available to nongovernmental public safety providers, Congress enables and encourages commercial providers to develop better technologies and applications tailored to public safety usage.<sup>6/</sup> The result will be the delivery of better public safety services at a better price.

## **II. CONGRESS DIRECTS THE COMMISSION TO INCLUDE CERTAIN NONGOVERNMENTAL ORGANIZATIONS AS CANDIDATES FOR ALLOCATED PUBLIC SAFETY SPECTRUM.**

In amending Title III of the Communications Act, Congress instructs the Commission to allocate 24 MHz of spectrum for "public safety services."<sup>7/</sup> Congress defines "public safety services" as "services --

(A) the sole or principal purpose of which is to protect the safety of life, health, or property;

(B) that are provided --

(i) by State or local government entities; or

(ii) by *nongovernmental organizations* that are *authorized by a governmental entity whose primary mission is the provision of such services*; and

---

<sup>6/</sup> In its report to the Commission and the National Telecommunications and Information Administration ("NTIA"), the Public Safety Wireless Advisory Committee ("PSWAC") concluded that it is incumbent on public safety agencies to utilize commercial services to meet their technological needs. See PSWAC Final Report, at ¶ 2.3

<sup>7/</sup> "Not later than January 1, 1998, the Commission shall allocate the electromagnetic spectrum between 746 megahertz and 806 megahertz, inclusive, as follows:

(1) 24 megahertz of that spectrum for public safety services according to the terms and conditions established by the Commission, in consultation with the Secretary of Commerce and the Attorney General.

(2) 36 megahertz of that spectrum for commercial use to be assigned by competitive bidding pursuant to section 309(j)."

See Section 337(a) of the Communications Act, amended by Section 3004 of the Budget Act.

(C) that are not made commercially available to the public by the provider."<sup>8/</sup>

Lacking the benefit of these amendments to the Communications Act at the time of drafting, the Commission failed to include the above-defined nongovernmental organizations in its allocation proposal.<sup>9/</sup> In light of the clear direction from Congress that the Commission should receive applications from and consider granting licenses to these nongovernmental organizations, the Commission should modify its proposals in the Notice to include these entities as candidates for the public safety spectrum. By so doing, the Commission, in addition to following Congress' mandate, will promote new and enhance existing services, thereby advancing the objective of the Commission in maximizing the efficient and effective use of this spectrum.

### **III. ACCESS TO SPECTRUM WILL GIVE COMMERCIAL ENTITIES THE TOOLS TO DEVELOP A COMPLETE SOLUTION TO THE PUBLIC SAFETY COMMUNITY'S INTEROPERABILITY PROBLEMS.**

---

In addition to stimulating the creation of essential technologies and desired partnerships, Congress' amendments will help solve the interoperability problems faced by public safety agencies. The Notice recognizes the urgent need for "better communications interoperability."<sup>10/</sup> But its fix -- more spectrum -- will move the public safety community only partially towards a solution. Indeed, PSWAC cites a variety of explanations, in addition to spectrum inadequacies, for the interoperability problem, including incompatible radio

---

<sup>8/</sup> See *id.*, Section 337(f) (emphasis added).

<sup>9/</sup> See Notice, at ¶ 9 & ¶ 1, n.1 (referencing "public safety agencies" and the public safety radio services identified in 47 C.F.R. § 90.15 as the entities to which its public safety allocation proposals apply).

<sup>10/</sup> Notice, at ¶ 8.

equipment,<sup>11/</sup> the inability (or sometimes failure) of public safety agencies to implement available technological advances,<sup>12/</sup> and inadequate funding.<sup>13/</sup>

FCC licenses to spectrum will greatly enhance Compu-DAWN's ability to develop and provide seamless, end-to-end public safety support services to the nation's police, fire and other emergency service agencies. Currently, Compu-DAWN's software is able to cure particular interoperability problems by translating one agency's wireless transmissions into a format that can be used by another agency with dissimilar wireless technologies. As wireless applications become increasingly sophisticated and transmit larger amounts of data, images and video, however, it will become more difficult and more expensive to solve these interoperability problems in software. Indeed, even at the present time, the public safety community demands a complete, wholesale solution to its vast interoperability needs.<sup>14/</sup>

---

<sup>11/</sup> PSWAC Final Report, at 2 (Executive Summary).

<sup>12/</sup> See PSWAC Final Report, at ¶ 2.2.13 ("The availability of efficient and effective radio technologies is necessary for Public Safety agencies to protect the lives and property of the country's citizens in a safe and economical manner."); ¶ 2.2.15 ("New services and technologies . . . that are critical for Public Safety users to continue to fulfill their obligation to preserve life and property are now becoming available."); ¶ 2.2.18 ("The migration to new technologies will be driven by the life cycle of existing equipment, the need for additional communications capacity, and advanced services and features required by Public Service agencies."); ¶ 2.1.21 ("Funding for acquisition of new spectrum-efficient technologies . . . is likely to be a major impediment to improving Public Safety wireless systems.").

<sup>13/</sup> See PSWAC Final Report, at ¶ 1.5 ("Equipment is old and funding for new equipment is often scarce."); ¶ 2.1.8 ("Interoperability (or the lack thereof) is often affected by non-technical factors including reluctance to adopt new approaches and funding limitations.").

<sup>14/</sup> See PSWAC Final Report at ¶ 1.4 (concluding that "[i]nteroperable communications systems are an absolute requirement").

With the ability to license and lease public safety spectrum, Compu-DAWN and other commercial public safety support providers will have the financial incentive and means to develop and provide a wholesale solution: a communications link between public safety officials in different jurisdictions, different levels of jurisdiction and different agencies.<sup>15/</sup> This link will allow the public safety community to exchange all types of information pertaining to their daily operations on a secure and confidential basis. Compu-DAWN urges the Commission to recognize the capabilities that commercial providers can develop with spectrum. These capabilities have the potential to satisfy the public safety community's urgent and expanding interoperability requirements.

**IV. CONGRESS' DEFINITIONS FOSTER MUCH-NEEDED PARTNERSHIPS BETWEEN  
COMMERCIAL ENTITIES AND PUBLIC SAFETY AGENCIES.**

---

One of the fundamental goals in this proceeding, as outlined in the Notice, is to ensure that public safety agencies have continuous access to the most up-to-date technologies for data and video communications.<sup>16/</sup> Commercial providers substantially devoted to public safety services can play a critical role in this endeavor.<sup>17/</sup> At the present time, however, because the provision of public safety services is so far less remunerative than other uses in a given band, commercial service providers lack incentives to develop

---

<sup>15/</sup> See Notice, at ¶ 8 (noting the need for better communications interoperability between these three public safety infrastructures).

<sup>16/</sup> *Id.*

<sup>17/</sup> PSWAC Final Report, at ¶ 2.3. Chairman Hundt also recognizes that "public safety community needs to work more closely with commercial providers to see how commercial providers may be able to serve public safety needs." Statement of Reed Hundt, Chairman of the FCC, before the House Telecommunications Subcommittee on February 12, 1997 ("Hundt Statement"), at 35.



technologies that assist the public safety community.<sup>18/</sup> As a result, commercial providers have failed to provide a market for public safety services to public safety agencies.<sup>19/</sup>

By allocating spectrum to those nongovernmental entities endeavoring to serve public safety agencies, Congress encourages commercial entities to develop affordable technologies tailored to public safety usage. Indeed, Congress' amendments offer Compu-DAWN the opportunity to fully exploit the technological advances in high speed data and video transmission, as well as improve its modulation techniques, to handle the gamut of public safety concerns, including security, prioritization of channel capacity, software application and computer hardware issues, system integration, system and component cost issues, and various operational issues. And, as the competitive arena for public safety technologies evolves, other commercial entities will create new capabilities to compete for partnerships with public safety agencies. Ultimately, as a result, the public safety community will have access to the most advanced products at the most affordable price.

## V. CONCLUSION

In allocating 24 MHz to public safety, the Commission must follow the congressional mandate, as outlined in the recent amendments to the Communications Act, to include certain nongovernmental entities as candidates to receive a portion of the public

---

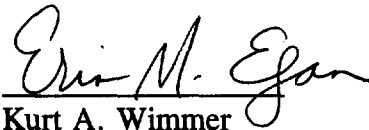
<sup>18/</sup> As pointed out in the January 1997 White Paper written by Gregory L. Rosston and Jeffrey S. Steinberg of the FCC, the marketplace alone has not been able to generate the incentives needed for workable partnerships between commercial services and public safety agencies. See Gregory L. Rosston & Jeffrey S. Steinberg, Using Market-Based Spectrum Policy To Prompt the Public Interest (January 1997) (hereinafter "White Paper").

<sup>19/</sup> See PSWAC Final Report, at ¶ 2.5 (use of commercial systems as a reasonable alternative for public safety agencies will depend on their being available at affordable costs).

safety spectrum.<sup>20/</sup> Congress' allocation decisions make imminent sense in assuring that public safety agencies catchup to and keep pace with the constantly changing innovations pervading telecommunications. By tailoring its regulations accordingly, the Commission will ensure that the nation's public safety agencies are able to respond to the public's safety needs with modern and innovative communications at the highest levels of efficiency and effectiveness.

Respectfully submitted,

COMPU-DAWN, INC.



Kurt A. Wimmer  
Erin M. Egan  
Covington & Burling  
1201 Pennsylvania Avenue, N.W.  
Post Office Box 7566  
Washington, D.C. 20044  
Phone: (202) 662-6000  
Fax: (202) 662-6291

Its Attorneys

September 15, 1997

---

<sup>20/</sup> If the Commission, despite Congress' direction, decides not to allocate public safety spectrum to commercial entities, the Commission should offer bidding credits to commercial public safety service and support providers when auctioning the remaining 36 MHz of spectrum in the 746-806 MHz band. *See In re Amendment of Part 1 of the Commission's Rules - Competitive Bidding Proceeding*, WT Docket No. 97-82, *Compu-Dawn's Comments on the Notice of Proposed Rulemaking*, filed March 27, 1997.



# **Compu-DAWN**

**Software Solutions  
for Public Safety.**

**A Fully Integrated  
Information Management System.**



# **Our Mission**

■ To be the premier provider of Software Solutions and Communications Technology for Public Safety.

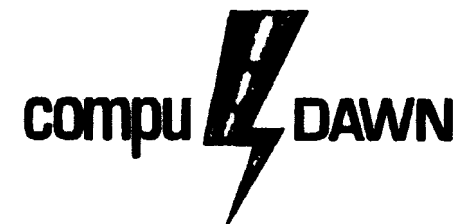
- ◆ Law Enforcement
- ◆ Fire
- ◆ EMS



# **The U.S. Market**

- The U.S. Market 21,860 police departments
- 35,690 fire departments
- All EMS and other public safety agencies

**Fewer than 20% are computerized**



# High Tech Cops

**Bringing the resources of headquarters to patrol cars**

**Computer and Software Technology**

**+ Wireless Communication**

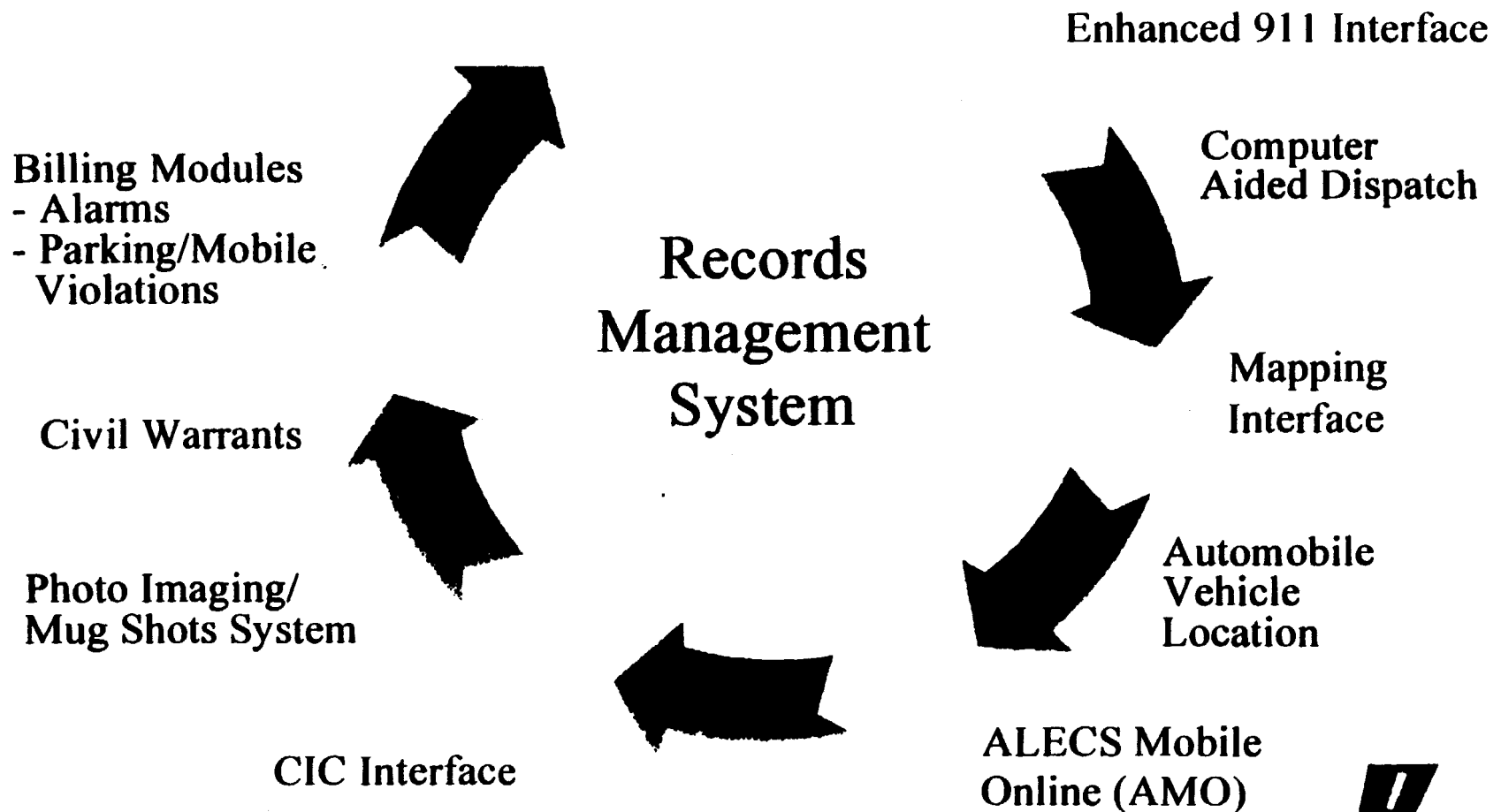
---

**= Reduced Crime**

Source: Mobile Officer - July 1995

compu  DAWN

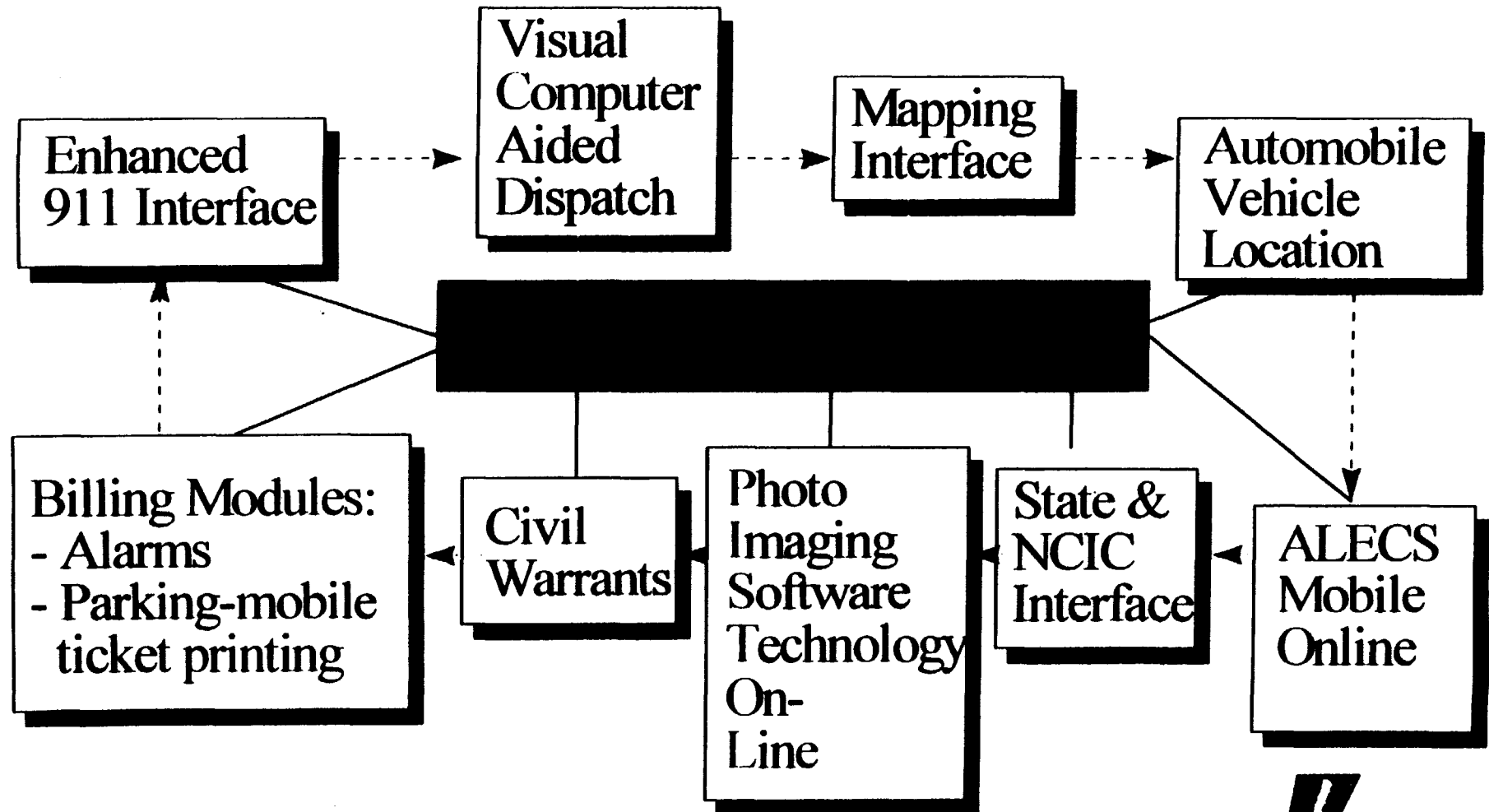
# ALECS 2000 Modules



compu  DAWN



# ALECS 2000™ Modules




compu  DAWN

# ALECS 2000™

Advanced Law Enforcement Computer Solutions



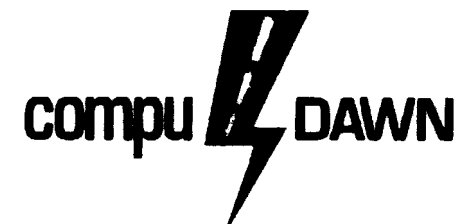
- State-of-the-art software solutions designed for public safety
- 14+ modules
- All modules interface with existing systems.
- Modules can be combined to form fully integrated solutions.

compu  DAWN

# ARMS

## Advanced Records Management System

- Organizes, processes and retrieves data in *real-time*.
- Provides information to field personnel so they can make informed decisions and quick responses.
- Information includes: person's history, location history, warrants, hazards, firearm permits, orders of protection, alarm/emergency contacts, property registration, etc.



# **E-911 Interface**

- Imports caller's name, number and location data from the telephone company.
- Retrieves any historical information on the caller or the location.
- Increased accuracy, decreased key strokes, decreased response time and increased safety.



# **VCAD**

## **Visual Computer Aided Dispatch**

- Identifies available units.
- Assists the dispatcher in assigning resources promptly.
- Obtains information from database.
- Provides the nearest cross streets, hydrant locations, etc.
- Date/time/event numbers automatically stamped.
- Checks hazard, warrant, firearm permit, alarm, order of protection and history from databases.
- Gives call back number.
- Touch screen, full color and user friendly.



# V-CAD

## Visual Computer Aided Dispatch

File Options Help

FRD1  
AVAIL  
13:56

FRD2  
AVAIL  
13:56

FRD3  
AVAIL  
13:56

EMS1  
AVAIL  
13:56

101  
AVAIL  
02:10

102  
AVAIL  
21:40

103  
AVAIL  
10:11

104  
AVAIL  
13:56

201  
AVAIL  
13:56

202  
AVAIL  
13:56

203  
AVAIL  
13:56

FRD1  
DIAK  
23:41

FRD1  
DISP  
22:15

102  
AVAIL  
02:00

102  
DIAK  
01:41

102  
DIAK  
20:24

103  
RESP  
01:20

102  
DIAK  
01:41

ENG1  
STAR  
02:41

Unit	Status	Elps Time	Priority	Type	Event #	Units
FRD1	DISP	22:15	5	DISTURBANCE/HOU	96-000401	COAS
102	DIAK	20:24	1	ROBBERY/H	97-000017	FLOW
FRD1	DIAK	23:41	1	ROBBERY/H	97-000017	FLOW
203	DIAK	20:47	5	DISTURBANCE/HOU	96-000401	COAS
102	ARRI	02:00	5	DISTURBANCE/HOU	96-000401	COAS
ENG1	STAR	02:41	5	DISTURBANCE/FBI	96-000403	
AMB1	LVHS	02:40	5	DISTURBANCE/HOU	96-000401	COAS

Event #	Elps Time	Priority	Type	Location
96-000404	01:11	1	ASSAULT/H	COASTAL COMPUTER SY
97-000015	21:42	1	BUROLARY/H	

Selected Event#  
96-000403















Label1

Command

# VCAD

## Visual Computer Aided Dispatch

Tools

 <b>K101</b> AVAL 13:28	 <b>K102</b> AVAL 13:28	 <b>11</b> AVAL 13:28	 <b>13</b> AVAL 13:28	 <b>31</b> AVAL 13:28	 <b>32</b> AVAL 13:28	 <b>12</b> AVAL 13:28	 <b>13</b> AVAL 13:28
 <b>K103</b> AVAL 13:28		 <b>17</b> AVAL 13:28	 <b>28</b> AVAL 13:28	 <b>33</b> AVAL 13:28	 <b>3161</b> AVAL 13:28	 <b>60</b> AVAL 13:28	

**NEW NEW**

Event #	Date 11/18/96	Time 1328	How Received: E911
Location <b>TOM'S BAKERY</b>		Cross Street:	
Address: <b>44</b>	Street: <b>FIRST STREET</b>	Apt Number:	Post:
City, Town, Village: <b>CARMEL</b>		Agency: <b>CARM</b>	State: <b>NY</b>
Event Type for Police: <b>E911</b>		Priority:	<input type="checkbox"/> Police <input type="checkbox"/> Fire <input type="checkbox"/> EMS
Desc: For Police Type:			
Name: <b>JOEL SMITH</b>		Role: <b>CALLER</b>	
Address: <b>44</b>	Street: <b>FIRST STREET</b>	Apt #:	AC: <b>914</b>
City, Town, Village: <b>CARMEL</b>		Phone: <b>432-7096</b>	State: <b>NY</b>

Command:

PrePlan Units Warnings Notes History GeoInfo

File	Hold	E911_1
Cancel	Mail	Pv E911_2

# Mapping Interface

- VCAD automatically displays location of event and available units.
- Provides quicker and more effective resource deployment.
- The dispatcher can ***zoom*** the map to give greater details to responding units.
- Locations of various past events can be displayed providing crime analysis.





# AVL

## Automatic Vehicle Location

- Automatically transmits location of vehicles and event to headquarters where they are tracked visually.
- Gives management and dispatchers easy visual representation.
- Provides real-time response of vehicles to an event.
- Increases officer safety and productivity.
- Provides management with enhanced supervisory capabilities.

